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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/719,950	12/18/2000	Kenichi Nishio	SONY-747US	5263

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1940 DUKE STREET  
ALEXANDRIA, VA 22314

EXAMINER
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ROGERS, SCOTT A

ART UNIT	PAPER NUMBER
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2627

DATE MAILED: 12/15/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 09/719,950	<b>Applicant(s)</b> NISHIO ET AL.	
	<b>Examiner</b> Scott A. Rogers	<b>Art Unit</b> 2627	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 29 September 2005.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-3,24-26,47-49,64,70-72 and 93-96 is/are pending in the application.
- 4a) Of the above claim(s) 4-23,27-46,50-69 and 73-92 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3,24-26,47-49,70-72 and 93-96 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input checked="" type="checkbox"/> Other: <u>Detailed Action</u> .                  |

## **DETAILED ACTION**

### ***Election/Restrictions***

Applicant's election of group 1 species (claims 1-3, 24-26, 47-49, 70-72, and 93-94) in the reply filed on 29 September 2005 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).

Claims 4-23, 27-46, 50-69, and 73-92 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected species, there being no allowable generic or linking claim. Election was made without traverse as noted above.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 24, 47, and 70 are rejected under 35 U.S.C. 102(b) as being anticipated by Arai (US 5559604 A).

Regarding claims 1, 24, 47, and 70:

Arai discloses an apparatus and method for correcting color of a color image by determining, using a neural network, a correction to data representative of the color

image based upon an estimated illuminant of the color image, and applying the correction to the data representative of the color image, wherein the illuminant comprises multiple sources of illumination (see abstract and col. 2, lines 10-40).

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 2-3, 25-26, 48-49, 71-72, 93-94, and 95-96 are rejected under 35 U.S.C. 103(a) as being unpatentable over Arai as applied to claims 1, 24, 47, and 70 above, and further in view of well known prior art.

Regarding claims 2-3, 25-26, 48-49, and 71-72:

While Arai does not disclose that the color image is obtained by an electronic camera that captures a still image or a succession of moving images, such cameras are notoriously old and well known in the prior art.

It would have been obvious to one of ordinary skill in the art to have provided such a well known camera as the source of color images to which to apply the color correction technique taught by Arai. This would allow application of the Arai to a common source of color images, which are known to require color matching for accurate reproduction of color under different sources of illumination.

Regarding claims 93-94:

While Arai does not disclose the data representative of the color image included with information regarding the illuminant, it is well known to include color image data with information regarding various metrics associated with the image data for accurate reproduction of the color image.

It would therefore have been obvious to one of ordinary skill in the art to have included the color image data with information regarding the estimated illuminant generated by Arai in order to allow correction of the color image data for reproduction on various output devices when and where desired.

Regarding claims 95-96:

While Arai does not disclose capturing a color image and generating data representative thereof, it would have been obvious to one of ordinary skill in the art to do so as noted above with respect to claims 2-3, 25-26, 48-49, and 71-72.

While Arai does not disclose recording or transmitting the data representative of the color image with data representative of the estimated illuminant, it is well known to record or transmit color image data with information regarding various metrics associated with the image data for accurate reproduction of the color image.

It would therefore have been obvious to one of ordinary skill in the art to have recorded the color image data with information regarding the estimated illuminant generated by Arai in order to allow for subsequent correction of the color image data for reproduction on various output devices when and where desired.

***Claim Rejections - 35 USC § 101***

Claims 47-49 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Claim 47 is directed to a recording medium, which is only defined by non-functional descriptive matter (color corrected data of a color image). The claimed steps do not define the structure of the recording medium, so any recording medium anticipates the claim (see MPEP 2114).

For purposes of the preceding art rejection, the preamble of claim 47 was disregarded and the claim was treated as a method claim.

***Cited Art***

The art made of record and not relied upon is considered pertinent to applicant's disclosure.

Arai et al (US 5929906) discloses a neural network, which has been trained in advance on the basis of the spectral distribution of an arbitrary illuminant to correct input color image data.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Scott A Rogers whose telephone number is 571-272-7467. The examiner can normally be reached Monday through Friday 6:00am-2:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kimberly Williams can be reached at 571-272-7471.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to TC2600 Customer Service at 571-272-2600. Official correspondence by facsimile should be sent to 571-273-8300. The USPTO contact Center phone numbers are 800-PTO-9199.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



**SCOTT ROGERS**  
**PRIMARY EXAMINER**

12 December 2005